Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matters of	
Rural Call Completion)	WC Docket No. 13-39
Connect America Fund	WC Docket No. 10-90
A National Broadband Plan for Our Future	GN Docket No. 09-51
Establishing Just and Reasonable Rates for) Local Exchange Carriers)	WC Docket No. 07-135
High-Cost Universal Service Support)	WC Docket No. 05-337
Developing an Unified Intercarrier) Compensation Regime)	CC Docket No. 01-92
Federal-State Joint Board on Universal Service)	CC Docket No. 96-45
Lifeline and Link-Up	WC Docket No. 03-109
Universal Service Reform – Mobility Fund)	WT Docket No. 10-208

COMMENTS OF WEST TELECOM SERVICES, LLC IN RESPONSE TO THIRD FURTHER NOTICE OF PROPOSED RULEMAKING

Robert W. McCausland	Sean M. Ward
VP, Regulatory and Government Affairs	Associate Counsel
West Telecom Services, LLC	West Corporation
3200 W. Pleasant Run Road	1601 Dry Creek Drive
Suite 300	Longmont, CO 80503
Lancaster, TX 75146-1086	SWard@west.com
RWMcCausland@west.com	Phone: 720-864-5510
Phone: 469-727-1640	Fax: 720-494-6600
Fax: 866-432-3936	
Cell/Text: 469-644-4954	Helen E. Disenhaus
	Telecommunications Law
	Professionals PLLC
	1025 Connecticut Ave., N.W.
	Suite 1011
	Washington, DC 20036
June 4, 2018	Phone: 202-789-3123
	Fax: 202-789-3122
	HDisenhaus@telecomlawpros.com
	Counsel for West Telecom Services

TABLE OF CONTENTS

EXE	CUTIV	/E SUMMARY	ii
I.	INT	RODUCTION	2
II.	THE REA ENS INV	E COMMISSION SHOULD ADOPT RULES REQUIRING AND FACILITATI ASONABLE COOPERATION AMONG ALL SERVICE PROVIDERS SURE THOROUGH ND SUCCESSFUL PROSPECTIVE AND RETROSPEC TESTIGATION OF RURAL CALL COMPLETION CONCERNS, INCLUDING E PROPOSED INTERMEDIATE PROVIDER REGISTRATION DATABASE.	ING TO TIVE G
III.	RUR	MPLIANCE WITH INDUSTRY BEST PRACTICES GENERALLY PROMO RAL CALL COMPLETION AND IS PREFERABLE TO COMMISSION MIC NAGEMENT	CRO-
	Α.	Providers Should Have Flexibility in Developing and Implementing RCC Poand Procedures and Negotiating Compliance Solutions With Other Providers	
	В.	Upstream Providers Can Use Negotiated Arrangements to Ensure Downstream	1
	C.	The Commission Should Grant the Long-Pending Petitions for Partial Waiver of "Phantom Traffic" Call Signaling Rules and Modify Those Rules to Reflect Exceptions Mirroring the Requested Waivers.	
IV.	HAR IMP	THE COMMISSION RETAINS THE "TWO-INTERMEDIATE-PROVIDER" SROR REQUIREMENT, THE COMMISSION SHOULD FURTHER PROMITION RATES BY IMPLEMENTING 'NORE-THE-HOP' EXCEPTIONS TO THE SAFE HARBOR RULE	IOTE TWO
	Α.	Unavailable Direct Connection "Ignore-the-Hop" Exception	22
	В.	Anomalous Network Congestion "Ignore-the-Hop" Exception	24
	C.	Public Interest Benefits of Adopting the Proposed Exceptions	25
CON	ICI LISI	ION	20

EXECUTIVE SUMMARY

West Telecom Services, LLC ("West") supports the adoption of implementing rules that encourage and facilitate cooperative industry solutions to rural call completion problems, including through the establishment of a contact database providing relevant contact information for all covered providers. It is appropriate for all providers in a call path to cooperate in making thorough retrospective and prospective investigations of rural call completion deficiencies, and establishment and maintenance of such an up-to-date database and would facilitate these efforts.

The Commission should also adopt the approach taken in its proposed rules and refrain from imposing on covered providers detailed procedures for demonstrating their compliance efforts. Rather, the Commission should allow providers to rely on established and evolving industry practices (including the codified general service quality standards of taking reasonable steps to avoid routes involving call crank-back, call looping, and call termination/re-origination activities), market-place forces (including upstream provider negotiations), and provider expertise (including for self-monitoring of RCC performance) to satisfy RCC Act compliance obligations. Requiring provider adherence to specific, detailed compliance procedures is neither the most effective nor the most appropriate means of achieving the RCC Act's objective. The Commission should follow its proposed approach, consistent with the Second Report and Order, and decline to impose unnecessary requirements and procedures on providers that may not keep pace with the rapidly evolving marketplace and could divert both financial and human resources from achievement of the ultimate goal of improved rates of rural call completion.

West recommends that the Commission increase the deadline for updating intermediate provider contact information from one week to ten business days (consistent with the period for covered providers' updates); and that the Commission make the deadline for implementation of the requirement that covered providers use only registered intermediate providers congruent with the

six-month phase-in period for implementation of the covered provider monitoring obligation or, preferably with the February 26, 2019, deadline for the initial Safe Harbor certification. West also recommends that the Commission add a provision to the rules that would permit upstream providers to terminate continuing downstream provider contracts as of the end of the phase-in period, or, preferably, February 26, 2019, if they cannot successfully complete good faith negotiations of any amendments reasonably required to accommodate and implement *RCC Act* compliance obligations.

Similarly, while accepted industry practices and the call signaling rules already adopted are appropriate in most situations to promote RCC, the Commission should specify conditions in which limited, common-sense waivers of the "phantom traffic" call signaling rules should be available. Grant of the multiple petitions for limited waivers of these call signaling rules, pending since 2012, would have no adverse consequences on achievement of the purpose of the rules – elimination of phantom traffic – or on RCC performance. The waivers are limited to situations where technology limitations prevent strict compliance, or would require prohibitively costly and unnecessary expenditures. Moreover, grant of the requested waivers would be in the public interest by promoting call completion, facilitating accurate call billing, and responding to privacy and public safety concerns. Along with granting the requested waivers, the Commission should adopt specific technology-based exceptions to its rules that mirror the waiver request in light of the continuing network technical characteristics that in many cases make strict compliance with the call signaling rules impossible.

West also strongly recommends that the Commission eliminate the "two-intermediate-carrier" requirement from the Safe Harbor certification conditions. The proposed rules already include key provisions affecting intermediate providers that, if adopted, will go far to address most rural call completion issues. These provisions, as noted above, include the establishment of the mandatory intermediate provider registration database; the responsibility for prospective and retro-

111

spective investigation of anomalous traffic situations; and the responsibility to take reasonable measures to avoid routes involving "bad hop" practices, including call crank-back, call looping, and call termination/re-origination. As West has previously shown, other RCC problems arise from insufficient rural telephone company facilities, and this problem can be addressed by establishing a "4 T-1" *prima facie* direct connection facilities augmentation standard, which can be applied in Section 251(f) state proceedings concerning direct connection requests to rural local exchange carriers ("RLECs"). These rule changes, if adopted, would virtually eliminate all RCC problems not due to atypically high localized traffic demand.

Should the Commission nonetheless decides to retain the "two-intermediate-carrier" requirement, the Commission should adopt two reasonable "ignore-the-hop" exceptions to its proposed Safe Harbor rules to promote improved rates of RCC and to take into account RCC anomalies not due to poor RCC practices. The "unavailable direct connection" exception, if adopted, would incentivize rural telephone companies to take shared responsibility for alleviating RCC problems by entering into direct connection with requesting intermediate providers where call volumes warrant facilities augmentation (because, as in RLEC direct connection situations, the requesting carrier has demonstrated simultaneous traffic volumes that require minimum facilities that are equivalent at least to the capacity of four T-1s). The Commission should also implement a similar "ignore-the-hop" anomalous network congestion Safe Harbor exception in cases of unusual and

¹ See, e.g., Comments of HyperCube Telecom, LLC, on Further Notice of Proposed Rulemaking, at 2 - 9 (filed Feb. 24, 2012), https://ecfsapi.fcc.gov/file/7021865912.pdf ("West 2-24-12 FNPRM Comments") at 18 – 19.

exceptional high traffic volumes, particularly when such high traffic volumes are the result of national and local emergencies, but also when they are occasioned by short-term special events. Adoption of these exceptions would both promote improvement in rural call completion rates and also ensure that intermediate providers are not penalized for hand-offs to another intermediate provider resulting from network conditions beyond their control, including rural telephone company refusal of warranted direct connection and unusual emergency and special event conditions of limited duration, where hand-off is required to permit and expedite call completion.

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

June 4, 2018

In the Matters of)
Rural Call Completion.) WC Docket No. 13-39
Connect America Fund) WC Docket No. 10-90
A National Broadband Plan for Our Future) GN Docket No. 09-51
Establishing Just and Reasonable Rates for Local Exchange Carriers) WC Docket No. 07-135
High-Cost Universal Service Support) WC Docket No. 05-337
Developing an Unified Intercarrier Compensation Regime) CC Docket No. 01-92
Federal-State Joint Board on Universal Service) CC Docket No. 96-45
Lifeline and Link-Up) WC Docket No. 03-109
Universal Service Reform – Mobility Fund) WT Docket No. 10-208

To: The Commission

COMMENTS OF WEST TELECOM SERVICES, LLC IN RESPONSE TO THIRD FURTHER NOTICE OF PROPOSED RULEMAKING

West Telecom Services, LLC ("West")², respectfully submits these comments in response to the Commission's *Third Further Notice of Proposed Rulemaking*³ in the above-referenced proceeding.

1

{00124006;v10}

²West Telecom Services, LLC ("West") is a wholly-owned subsidiary of West Corporation, a leading

The *Third FNPRM* proposes additional measures, focusing on the obligations of intermediate providers, to implement the *RCC Act*⁴ and promote further improvements in rates of call completion in rural areas ("RCC").

I. INTRODUCTION

In its role as a leading intermediate services provider, West facilitates and effects call completion regardless of the technologies used by the providers originating and terminating the calls, and regardless of whether the providers are located in urban, suburban, or rural areas. As such, West is performing a crucial role in the Nation's transition to IP by interconnecting providers' disparate voice networks for the completion of billions of voice calls. West has an extensive record of participation in industry organizations such as the Alliance for Telecommunications Industry Standards ("ATIS") and of supporting joint efforts by service providers to resolve call completion issues as

technology enablement company connecting people and businesses around the world. West is the successor to HyperCube Telecom, LLC, which previously filed in this docket and WC Docket 10-90 et al., comments, ex parte presentations, and a petition for partial waiver of the call signaling rules still relevant to this proceeding. For convenience of reference, these will be referred to as West filings except in initial full citations.

³ Rural Call Completion, Second Report and Order and Third Further Notice of Proposed Rulemaking, WC Docket No. 13-39, FCC 18-45 (rel. Apr. 17, 2018) (respectively, "Second R&O" and "Third FNPRM"). A summary of the Third FNPRM was recently published in the Federal Register. Federal Communications Commission, Rural Call Completion, 83 FR 21983, 21983-95 (May 11, 2018).

⁴ Improving Rural Call Quality and Reliability Act of 2017, Pub. L. No. 115-129 (2018) ("RCC Act")., (adding new Section 262 to the Communications Act). The RCC Act requires the Commission to adopt registration and service quality standards for intermediate service providers and to make registration information publicly available.

they arise. In West's experience, a large proportion of call completion problems can be identified and resolved when providers cooperate to analyze them and undertake joint remediation efforts.

II. THE COMMISSION SHOULD ADOPT RULES REQUIRING AND FACILITATING REASONABLE COOPERATION AMONG ALL SERVICE PROVIDERS TO ENSURE THOROUGH AND SUCCESSFUL PROSPECTIVE AND RETROSPECTIVE INVESTIGATION OF RURAL CALL COMPLETION CONCERNS, INCLUDING THE PROPOSED INTERMEDIATE PROVIDER REGISTRATION DATABASE.

West endorses the focus of the *Third FNPRM* on promoting cooperation among all providers in a call path⁵ to "prevent unjust or unreasonable discrimination among areas of the United States in the delivery of covered voice communications." West strongly supports the Commission's approach of requiring thorough prospective and retrospective investigations of identified call completion deficiencies,⁷ and of adopting requirements that would facilitate cooperation in these investigations.

Adoption of Commission rules requiring registration of intermediate service providers,⁸ including the filing of contact information identifying contacts responsible for addressing rural call completion issues," and website publication of contact information, will advance such cooperation, as well as fulfill the Commission's mandate under the *RCC Act* to implement registration procedures

⁵ The *Third FNPRM* proposes regulations to ensure "that the participants in the call path share the responsibility to ensure that calls to rural areas are completed." *Third FNPRM* at 31, ¶ 68.

⁶ RCC Act.

⁷ See Second R&O at 7, ¶ 15 (imposing on "covered providers" that make the initial call path routing determination a "monitoring requirement [that] entails both *prospective* evaluation to prevent problems and *retrospective* investigation of any problems that arise").

⁸ Proposed rule 47 C.F.R. § 64.2115.

⁹ *Third FNPRM* at 31, ¶¶ 71 - 72.

for intermediate providers. By making available key information such as specific contact details for personnel charged with addressing call completion concerns, the proposed procedures will facilitate cooperative and efficient resolution of RCC issues. While industry provider databases already exist, and providers are encouraged to participate in them and update the reported information, participation in these databases is voluntary, and the information they contain may be less specific and less current than the information that would be required under proposed Section 64.2115.¹⁰ The proposed certification and reporting rules also facilitate self-monitoring within a provider organization and provide transparency for the public.

Given that many providers such as West already participate in voluntary contact registration databases, such as those identified in the *ATIS RCC Handbook*, West agrees with the Commission that general compliance with the proposed rule should not be unduly burdensome. Because cooperation of all providers in a call path is often essential to resolving call completion problems, and because the contact and other identification information to be reported to the Commission should be readily available to the reporting providers, this registration requirement should be applicable to all intermediate providers, regardless of size, without an exception for smaller providers. As noted in the *Third R&O*, a 30-day Commission registration deadline already applies to new carriers, so applying the same deadline to new intermediate provider registration should be reasonable. West

¹⁰ The ATIS RCC Handbook, for example, identifies several such databases. See Alliance for Telecommunications Industry Solutions, Intercarrier Call Completion/Call Termination Handbook, ATIS-0300106 (2015) ("ATIS RCC Handbook"), Clause 7.4, Contact Directories (identifying and recommending use of several contact directories).

¹¹ See Third FNPRM at 31, \P 72.

¹² See Third FNPRM at 31, ¶ 72 and n. 218.

recommends, however, that the Commission increase from seven days¹³ to ten business days its proposed timeframe in proposed Section 64.2115(c) for reporting changes in previously-filed registration information.¹⁴ This slightly longer timeframe would allow sufficient time, for example, for changes in identified technical contact personnel to be processed and reported to personnel handling Commission compliance filings. Given that the database would continue to reflect prior provider information, there should be little adverse impact from the slightly longer compliance period even in situations where other providers seek to reach contact representations to address a specific call completion anomaly.

III. COMPLIANCE WITH INDUSTRY BEST PRACTICES GENERALLY PROMOTES RURAL CALL COMPLETION AND IS PREFERABLE TO COMMISSION MICRO-MANAGEMENT.

West agrees with the Commission's preliminary conclusions, reflected in the text of its proposed regulations, and consistent with the approach taken in the *Second R&O*, ¹⁵ that the Commission should not "impose an unnecessarily burdensome mandate requiring *direct* covered provider monitoring of the entire call chain," ¹⁶ and "that proposals that rely on or are consistent with industry best practices to develop service quality standards will be less burdensome on intermediate providers

¹³ See Third FNPRM at 32, \P 72.

¹⁴ This is consistent with the time period of new Section 64.2113 covered provider updates, and many service providers are both intermediate providers and covered providers.

¹⁵ Second R&O at 6, ¶ 11 (revising existing RCC rules "to better reflect strategies that have worked to reduce rural call completion problems while at the same time reducing the overall burden of our rules on providers").

¹⁶ Second R&O at 17, ¶ 34.

than other potential approaches."¹⁷ Providers already have in place established means of ensuring compliance with their regulatory obligations and industry best practices, and the Commission has enforcement mechanisms to address non-compliance situations. Micro-management of the compliance process by the Commission would be not only unnecessary and inefficient in itself, but also would divert both providers' resources from implementation of more effective means of improving rates of rural call completion and Commission resources from undertaking necessary enforcement actions. The Commission's proposed rules appropriately focus on registration requirements and the use of only registered intermediate providers by upstream providers; deterrence of such "bad hop" activities as call looping, call crank-back, and call termination/re-origination; and RCC performance self-monitoring by service providers.

As a general matter, service providers' compliance with industry best practices standards will achieve the goal of improved RCC without imposing unnecessary and burdensome obligations.¹⁸ Industry standards as those detailed in the ATIS RCC Handbook¹⁹ reflect the input of all types of providers and attempt to capture industry consensus as to the most efficient and effective approaches to resolution of RCC problems. Because the current standards have been in existence for several years, providers have had sufficient time to become familiar with them, and reputable providers have already developed appropriate measures to adhere to them. Service providers also regularly

¹⁷ Second R&O at 35, ¶ 86.

¹⁸ See Third FNPRM at 35, ¶86 ("[P]roposals that rely on or are consistent with industry best practices to develop service quality standards will be less burdensome on intermediate providers than other potential approaches...").

¹⁹ See ATIS RCC Handbook, supra n. 9.

participate in working groups to update ATIS standards, including the ATIS RCC Handbook, to reflect evolving industry norms and best practices. Significantly, rather than attempting to craft a one-size-fits-all solution, the ATIS RCC Handbook recommends in some detail a number of procedures and approaches that can be implemented by service providers consistent with their unique circumstances.

There are a few circumstances, however, in which the ATIS RCC Handbook may not necessarily reflect best approaches to resolving certain situations, including in some cases because of regulatory constraints. Industry standards are also evolving as technologies change and new standards and protocols are published. Because the real objective is not compliance with industry standards, but reduction of rural call completion deficiencies, the Commission should continue to decline to mandate strict compliance with the ATIS RCC Handbook²⁰ or other industry standards in all situations and should grant appropriate rule waiver petitions. It should also acknowledge the need for and adopt certain exceptions to the RCC and call signaling rules.

A. Providers Should Have Flexibility in Developing and Implementing RCC Policies and Procedures and Negotiating Compliance Solutions With Other Providers.

West strongly recommends as a general matter that the final RCC Act implementing regulations take the approach preliminarily chosen by the Commission to afford intermediate providers the flexibility to develop and implement rural call completion compliance policies and procedures appropriate for each provider. Such individualized policies and procedures can be tailored to reflect

²⁰ See Second R&O at 10, ¶ 19 (rejecting mandating standards and practices of the ATIS RCC Handbook).

applicable marketplace conditions and the changing industry environment, the needs of other providers in the call path, and the current and planned capabilities of the provider's individual networks.²¹

The Commission should therefore specifically reject approaches that would require *direct* monitoring of the call path by all providers or specify how such monitoring must be effected.²² In lieu of mandating direct monitoring of each call path, the Commission should permit originating providers to develop and implement RCC compliance procedures based on negotiated arrangements with intermediate providers that reflect the capabilities of each party and the desires and needs associated with their respective obligations. The *ATIS RCC Handbook* encourages use of such negotiated arrangements to promote effective management by upstream providers of the activities of their downstream intermediate providers.²³ Moreover, because proposed rule Section 64.2117(b) already

For example, West has found that by cooperating in test calls, providers can often identify the source of particular call completion problems. See Letter from Helen E. Disenhaus to Marlene H. Dortch, Secretary, Notice of Ex Parte Meeting, WC Docket No. 13-39 (dated Jul. 22, 2013) (reporting an exparte meeting with Commission staff discussing West's call completion study and joint investigation of RCC anomalies), https://ecfsapi.fcc.gov/file/7520932752.pdf. However, West supports the Commission's decision not to establish a mandatory test line requirement. West recommends, however, that rural telephone companies experiencing RCC problems and seriously interested in resolving them should establish test lines to facilitate cooperative resolution of RCC problems without the need to involve RLEC end-user customers in the process. The ATIS RCC Handbook, for example, describes the use of test lines as "[o]ne way in which terminating SPs may be able to expedite trouble resolution, in cases where the trouble has been reported by the called rather than the Calling Party." ATIS RCC Handbook, Clause 7.2.1, Use of Test Lines for Call Completion Trouble Resolution. The Second R&O encourages but does not mandate the use of test lines. Second R&O at 10, ¶ 20 n.66; 23 - 24.

22 Cf. Second R&O at 7, ¶ 15 and n.44 (revising subsection (b) of the proposed rule "to focus subsection (b) directly on resolving rural call completion problems, rather than a particular means for doing and the completion of the proposed rule "to focus subsection"."

²³ See, e.g., ATIS RCC Handbook, Clause 6.1, Contractual Arrangements; Clause 6.9, Inheritance of Re-

specifically requires each intermediate provider to "have processes in place to monitor its rural call completion performance," intermediate providers' monitoring procedures and results can be made available on request to an upstream provider.

Intermediate providers should not, however, be required by the Commission to implement policy and procedure changes based on unilateral originating provider demands. Instead, market forces should be allowed to prevail such that intermediate providers may strive to accommodate the needs of upstream providers within their existing and planned capabilities.

B. Upstream Providers Can Use Negotiated Arrangements to Ensure Downstream Providers Comply With Registration Obligations.

With respect to interpretation of the term "use" in new Section 262(b) of the RCC Act, West agrees that it should be interpreted to mean "rely on." In implementing new Section 262(b), however, the Commission should not require a "covered provider" to engage in *direct* monitoring of all providers in the call path in order for the "covered provider" to satisfy its obligations not to "use" unregistered providers. Negotiated arrangements, when combined with active monitoring procedures, are an accepted and proven industry approach to ensuring satisfactory performance by down-

strictions. See also Second R&O at 10, ¶ 20 n.66 (acknowledging ATIS RCC Handbook best practices include "contractual agreements with intermediate providers to govern intermediate provider conduct.").

²⁴ Proposed rule 47 C.F.R. § 64.2117(b).

²⁵ In this context, a "covered provider" should be interpreted to refer to both originating providers and intermediate providers that precede the "used" intermediate provider in the call path.

stream providers, and this approach should be applicable in the case of the intermediate provider RCC rules as well as in the case of "covered providers."²⁶

With respect to implementation of the initial registration obligation, assuming reasonable completion of this rulemaking, a phase-in period of 30 days following the publication of final registration rules should be acceptable. With respect to implementation of the no-unregistered-provider rule for covered providers, however, a six-month phase-in period, consistent with the phase-in period for covered providers' monitoring obligations, ²⁷ or, preferably, one aligned with the February 26, 2019, deadline for the initial Safe Harbor certification deadline under proposed Section 64.2107(a)(2), ²⁸ would be more appropriate. This would allow adequate time for negotiation of and phase-in of any contract modifications necessary to demonstrate compliance with registration requirements governing the use of downstream providers. The Commission's rules should specifically give a "using" upstream provider the right to terminate, as of such deadline, any existing contract with a "used" downstream provider if the agreement retains unmodified contract provisions conflicting with implementing amendments, such as certification requirements, reasonably negotiated in good faith by a "using" provider to ensure and document that upstream provider's compliance with the *RCC Adt* rules.

²⁶ See Second R&O at 17, ¶ 34 and n. 112.

²⁷ Second R&O at 25, ¶ 50.

Proposed Section 64.2107(a)(2)(A) specifies that the initial Safe Harbor certification would be due on or before February 26, 2019, one year after enactment of the RCC Act. This deadline is likely to be reasonably aligned with the six-month phase-in period for the "covered provider" monitoring rules adopted in the Second R&O. See Second R&O at 25, ¶ 50.

West does not believe, however, that the Commission should mandate inclusion of any specific contractual provisions or certifications in the arrangements between providers. Mandating specific contract provisions not only would unnecessarily interfere with the workings of the marketplace, but also it could be codifying requirements and conditions that may not reflect developing industry best practices and implementation approaches and systems. Consumers benefit, and rural call completion rates are improved, when providers can use least cost and overflow routing arrangements that are dynamic and flexible.²⁹ Affected providers are in a far better position than the Commission to determine which arrangements can be and should be used consistent with *RCC Adt* general compliance obligations.

For example, with respect to compliance with Section 262(b) under the *RCC Act*, while consultation of the Commission's registry may be one means of avoiding use of an unregistered provider, that should not be the only means of compliance by an upstream provider. A certification of registration by a downstream provider to be updated in the event of de-registration may be an alternative that is even more effective as well as more efficient. The goal is ensuring that upstream providers have satisfactory measures in place to prevent rural call completion issues, not that they check a registry. Therefore, the Commission need not and should not require providers to check the Commission's intermediate provider registration list before using a downstream provider.

The Second R&O, in which the Commission declined to mandate a maximum number of "hops" between providers in a call path, id., reflected the Commission's proper sensitivity to covered providers' need for flexibility. Second R&O at 11 ¶ 21 (noting "covered providers would face additional burdens if they lacked flexibility to efficiently route calls during periods of high call volume").

³⁰ Cf. Second R&O at 7, ¶ 15 n.44 (modifying a proposed rule to focus on "resolving RCC problems

Requiring an upstream provider to check the registry frequently to confirm the continuous registration of its downstream providers would be a wasteful and unnecessary obligation. An upstream provider may find it more effective, and more cost-efficient, to require its downstream providers to report to the upstream provider promptly any deregistration, rather than forcing the upstream provider to constantly check and re-check the registered provider list. The Commission should require registration, but it should not micromanage how upstream providers use the database, or what originating providers and intermediate providers include in their negotiated agreements.

Similarly, despite the Commission's concerns, upstream providers do not need to know at all times "the identity of all intermediate providers in a call path." It is at most only necessary that such information be promptly obtainable when there is a call completion problem requiring investigation or a request from regulatory authorities. A "using" (or upstream) covered provider should be able, as the Commission suggests, 2 to demonstrate satisfaction of its own *RCC Act* compliance obligations based on the representations and contractual obligations it receives from the next downstream intermediate provider in the call path, as well as its own quality standard monitoring

_

rather than a particular means of doing so."). See also Second R&O at 17, ¶ 34 (declining "to impose an unnecessarily burdensome mandate requiring direct covered provider monitoring of the entire call chain.").

³¹ See Third FNPRM at 12, \P 22 n.77.

³² See also ATIS RCC Handbook, Clause 6.9, Inheritance of Restrictions.

procedures and commitments from its providers, which may flow through to providers further down the call path. Not only will limiting mandatory disclosure to covered providers of downstream providers avoid unnecessary duplicative call monitoring efforts, with attendant costs that would be borne by consumers, but also it will place the monitoring burden at each step in the call path on the entity that has the ability to establish the conditions under which the "use" occurs through its contractual privity with the "used" intermediate.³³ In addition, it will preserve the confidentiality of sensitive proprietary routing information. So long as the upstream provider has adequate performance monitoring systems and flow-through provider obligations applicable to its immediately downstream providers, and the ability to demand disclosure of other providers as necessary, the upstream provider would be neither practicing willful ignorance³⁴ nor ignoring its provider obligations under the *RCC Act.*³⁵

For these reasons, the Commission should decline to adopt a requirement that intermediate providers disclose to upstream providers the names of all downstream intermediate providers in the call path. To be able to respond to call completion inquiries, it should be sufficient for an intermediate provider to provide promptly on request to its adjacent upstream provider, and to regulatory officials, the name of any next-following "intermediate provider" in the path of that particular call.³⁶

³³ Cf. Second R&O at 2, \P 3 (noting "Long-distance providers that select the initial long distance call path do not necessarily contract directly with every intermediate provider in the call path.").

³⁴ Cf. Second R&O at 13, ¶ 25 (willful ignorance not an excuse for covered provider's failure to investigate evidence of RCC poor performance).

³⁵ Cf. Third FNPRM at 34, ¶ 81 (querying whether a covered provider can comply with the RCC Act without knowing the identity of all intermediate providers in a call path).

³⁶ Compliance with the requirement of proposed rule 64.2107(a)(1) for nondisclosure agreement

This would provide sufficient information to facilitate cooperative investigations, since proposed Section 64.2115 requires registration, including provision of essential contact information, by all intermediate service providers.

It should also be left to each "using" upstream provider to negotiate the amount of advance notice the provider requires as to the identification of other providers or types of providers in a call path. Such an approach is not inconsistent with the ATIS RCC Handbook's view that when upstream providers are aware of the downstream providers handling their traffic they "can perform due diligence and possibly better manage call completion issues." So long as an upstream provider knows the identity of and specific compliance obligations it has required of the immediately downstream provider, the upstream "using" provider should have performed the due diligence it needs and have the information it requires to manage call completion issues effectively.

Moreover, to instead require advance identification by an intermediate provider of all other intermediate providers that could possibly participate in a given call path could foreclose competition by new market entrants and limit routing options in ways that could be inefficient and less than optimal in terms of network congestion and cost without providing additional benefit in terms of improved rural call completion rates. It would also require disclosure of sensitive proprietary busi-

exceptions for disclosure of downstream providers should be sufficient for this purpose.

³⁷ See ATIS RCC Handbook at 34, Clause 6.2, Manage the Number & Identity of Intermediate Providers (cited at Third FNPRM at 34, ¶ 81).

ness information. Because a "using" upstream provider is a "covered provider" responsible for its own compliance, the Commission can reasonably rely on each upstream "covered provider" to implement the policies and practices needed to satisfy its obligations. Such a goal-focused approach, particularly in the dynamic telecommunications industry, is preferable to Commission-imposed procedural requirements.

C. The Commission Should Grant the Long-Pending Petitions for Partial Waiver of the "Phantom Traffic" Call Signaling Rules³⁸ and Modify Those Rules to Reflect Exceptions Mirroring the Requested Waivers.

Regarding compliance with industry standards for call signaling, the Commission requests information as to whether additional call signaling rules are necessary "to prevent intermediate providers from manipulating signaling information for calls destined for rural areas." West believes that additional rules are unnecessary and undesirable. Rather, what is required is modification of the existing rules to take into account network conditions that prevent strict compliance with the phantom traffic rules in certain circumstances, or that put compliance with these rules at odds with public safety and privacy protection obligations.

15

³⁸ 47 C.F.R. § 64.1601(a)(1)-(2) ("phantom traffic rules"). The prior call signaling rules were amended to promote elimination of "phantom traffic." *In the Matter of Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; Universal Service Reform- Mobility Fund,* WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN Docket No. 09-51, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663 (2011), aff'd *sub nom. In re: FCC 11-161* (10th Cir. 2014) ("USF/ICC Transformation Order").

The ATIS RCC Handbook essentially punts on this issue, because it has no choice other than to point service providers to their obligation to comply with the Commission's call signaling rules. ⁴⁰ However, the ATIS RCC Handbook also recognizes that there are situations in which strict compliance with these rules is not technically feasible. ⁴¹

West⁴² and others⁴³ have brought some of these circumstances, which require limited common sense waivers of the phantom traffic call signaling rules such as the prohibition on alteration of

⁴⁰ See ATIS RCC Handbook, Clause 6.8, Do Not Manipulate Signaling (citing ATIS RCC Handbook, Clause 8, Regulatory Environment); see also ATIS RCC Handbook, Clause 8.2.1, Phantom Traffic.

⁴¹ See, e.g., ATIS RCC Handbook, Clause 5.1.1, Identification of Calling Party ("If there is inband, i.e., Multi-Frequency signaling (MF) in the call path, CPN will not be received at the terminating switch."); Clause 5.1.1.3, Identification of the Chargeable Party ("In SIP, the mechanism for population of the comparable information [where CN differs from CPN] is not yet standardized. Therefore, an ISUP-SIP mapping has not been standardized.").

⁴² HyperCube Telecom, LLC, Petition for Limited Waiver of the Commission's Call Signaling Rules in 47 C.F.R. Docket 10-90 64.1601, WC Nos. et al., (filed https://ecfsapi.fcc.gov/file/7021979594.pdf (hereinafter, "West Petition"). See HyperCube Telecom Petition for Limited Waiver of Call Signaling Rules, CC Docket Nos. 01-92, Public Notice, DA 12-1053 (Jun. 28, 2012). West has sought a limited waiver for certain circumstances in which compliance with the phantom traffic call signaling rules is not technically feasible given the network technology deployed or where industry standards would permit deviation from the obligation to pass signaling information unaltered (as, for example, where public safety and privacy protection is implicated). Technical grounds for waiver include "circumstances where the originating carrier does not pass IP signaling information because (i) this information is improperly formatted or contains unverifiable CPN or CN" [such as where a pseudo-North American Numbering Plan number or no CPN or CN information is transmitted by the originating party(ies)]; (ii) "the signaling equipment of the next carrier in the call flow cannot process the information" [as in the case where Multi-Frequency ("MF") signaling is used, when, as recognized in the USF/ICC Transformation Order at ¶ 716, it is not technically feasible to transmit either the CPN or CN in the ANI field to a downstream carrier that receives terminating traffic over an MF facility]; or (iii) there is a privacy restriction with the signaling information and it is known to HyperCube that the equipment of the next carrier in the call flow inhibits the proper use of the privacy bit." West Petition at 2, 4 – 6. See also HyperCube Telecom LLC's Reply in Support of its Petition for Limited Waiver of the Commission's Call Signaling Rules in 47 C.F.R. ∫ 64.1601(filed Aug. 24, 2012) at 4 - 6 (clarifying that waiver for interconnected VoIP (not wireless)

call data information,⁴⁴ to the Commission's attention.⁴⁵ These meritorious petitions for partial waivers of the amended call signaling rules have been pending since 2012, but to date the Commission has failed to act on them.⁴⁶ In situations such as those covered by the pending waiver petitions,

traffic is needed for SIP-terminated calls where the terminating carrier is unable to receive the CPN or CN information because SIP has no standardized concept of a CN).

⁴³ See AT&T Petition for Limited Waiver of Call Signaling Rules, CC Docket Nos. 01-92, Public Notice, DA 12-34 (Jan. 10, 2012); CenturyLink Petition for Limited Waiver of Call Signaling Rules, CC Docket Nos. 01-92 et al., Public Notice, DA 12-104 (Jan. 30, 2012), supplemented Sept. 13, 2012; Petition for Limited Waiver of Verizon (filed Feb. 10, 2012), Public Notice, DA 12-231 (Feb. 16, 2012). See also Joint Petition For Limited Waiver [of the LNGS Carriers] (filed June 20, 2012); Petitions for Limited Waiver filed by FairPoint Communications, Inc. (filed Mar. 28, 2012); Hawaiian Telecom, Inc. (filed Mar. 1, 2012); Alaska Communications Systems Group, Inc. (filed Mar. 16, 2012); Level 3 Communications, LLC (filed Apr. 5, 2012); General Communication, Inc. (filed Feb. 27, 2012), Public Notice, DA 12-321 (March 1, 2012); The Alaska Rural Coalition (filed Mar. 23, 2012); Consolidated Communications, Inc. (filed May 11, 2012).

⁴⁴ 47 C.F.R. § 64.1601(a).

⁴⁵ In the *USF/ICC Transformation Order*, the Commission declined requests to include technology-based exceptions in the revised call signaling rules but noted the availability of waivers under Section 1.3 of the Commission's Rules. *USF/ICC Transformation Order* at ¶ 723.

⁴⁶ At the request of Commission staff, several petitioners met with Commission staff in December 2014 and confirmed that the conditions that had led to the filing of the petitions still existed in the network environment and that there was a continuing need for the requested waivers. Letter from Steven A. Augustino to Ms. Marlene H. Dortch, Secretary, WC Docket No. 10-90 (dated Dec. 12, 2014), https://ecfsapi.fcc.gov/file/60001009189.pdf. See also Letter from Helen E. Disenhaus to Ms. Marlene Docket Dortch. Secretary, WC Nos 13-39, 10-90 (dated May https://www.fcc.gov/ecfs/filing/60001031060 (noting there had still been no action on the pending West waiver petition). When the Commission adopted the call signaling rules, the Commission expressly declined to include provisions for waivers based on network technology, but it noted that waivers could be requested under Section 1.3 of the Commission's Rules. USF/ICC Transformation Order at ¶ 723 (citing 47 C.F.R. § 1.3). Under Section 1.3, waivers may be granted upon a showing of good cause and where strict application of the rules would be contrary to the public interest, and the Commission may consider such factors as hardship, equity, and that granting the

strict adherence to the current call signaling rules is inconsistent with effective call completion, accurate jurisdictional identification and billing of calls, and privacy and public safety priorities. Grant of the requested waivers would promote the elimination of the phantom traffic that was the purpose of adoption of the rules.⁴⁷

The Commission should therefore promptly grant these petitions. It should also expressly modify the phantom traffic call signaling rules to include exceptions to them in particular circumstances such as those raised by the limited waiver petitions.⁴⁸ This will allow service providers to respond to market conditions that reflect varying network technologies and capabilities, privacy and public safety concerns, and the need to populate missing call data information in a manner that provides additional benefits to fraud- and robocalling-related tracebacks. In addition, it will promote, not detract from, effective call completion.

waiver would more effectively implement public policy. Northeast Cellular Telephone Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990); WAIT Radio v. FCC, 418 1153, 1159 (D.C. Cir. 1969), cert. denied, 409 U.S. 1027 (1972).

⁴⁷ The *USF/ICC Transformation Order* states that "phantom traffic" "refers to traffic that terminating networks receive that lacks certain identifying information." *USF/ICC Transformation Order* at ¶ 703, ¶ 723 and n.1249; *see also ATIS RCC Handbook* at Clause 8.2.1, *Phantom Traffic.* One situation for which waiver is requested in the West Petition is where service providers want to *supply* needed missing information, in lieu of transmitting received signaling information unaltered. Denying grant of the requested waivers is thus at odds with the purpose for which the rules were adopted.

⁴⁸ Cf. Second R&O at 11, ¶ 21 and n.71 (rejecting a proposal for permitting additional hops to be included in a call path pursuant to a Safe Harbor waiver "as unduly burdensome and too slow to be compatible with the dynamic routing needs of covered providers").

IV. IF THE COMMISSION RETAINS THE "TWO-INTERMEDIATE-PROVIDER" SAFE HARBOR REQUIREMENT, THE COMMISSION SHOULD FURTHER PROMOTE IMPROVED RURAL CALL COMPLETION RATES BY IMPLEMENTING TWO "IGNORE-THE-HOP" EXCEPTIONS TO THE SAFE HARBOR RULE.

West strongly recommends that the Commission eliminate the "two-intermediate-provider" safe harbor certification requirement included in Section 64.2107(a)(1) of the Commission's Rules. As the Commission recognized in the *Second R&O*, "the vast majority of covered providers have concluded that the benefits associated with always limiting to two the number of intermediate providers in the call path do not outweigh the associated costs."

Section 64.2115 of the proposed rules requires intermediate carriers to register, and proposed Section 64.2117(a) specifies that compliance with Quality Standards requires intermediate providers to take "reasonable steps" to prevent loop-back, "crank back," and call termination/reorigination "bad hop" practices, ⁵⁰ through prospective and retrospective rural call completion performance monitoring, which would be required by proposed Section 64.2107(b).

As West has previously shown, when providers work cooperatively with others in the call path, they can identify traffic anomalies resulting from "bad hop" practices, and thus take remedial action to stop them.⁵¹ In West's experience, "bad hops" and inadequate rural telephone company

⁴⁹ Second R&O at 11, ¶ 21.

⁵⁰ See Third FNPRM, Appendix C at 50 – 51. See also ATIS RCC Handbook, Clauses 6.3, 6.4, 6.6; Third FNPRM at 35, ¶ 87.

⁵¹ See generally Comments of HyperCube Telecom, LLC on Further Notice of Proposed Rulemaking, WC Dkt. 13-39 (filed Jan. 16, 2014), https://ecfsapi.fcc.gov/file/7521066335.pdf ("West FNPRM Comments"); see id. at 2 - 3 n.4 (citing previous filings), id. at n.28 (describing RLEC unmet need for augmented facilities as at least partial cause of one RCC problem).

facilities are responsible for most rural call completion problems. The Commission's proposed rules already provide the tools to address the "bad hop" situations. To address the inadequate facilities situation, West again encourages the Commission to adopt a *prima facie* standard that would, in most cases, be applied in Section 251(f) proceedings to require RLEC facility augmentation when a requesting provider has demonstrated bilateral traffic on the route equivalent to the capacity of four T-1s.⁵² Adoption of this proposal, combined with adoption of the already-proposed registration and Quality Standard rules, would ensure that the Commission would have implemented sufficient measures for addressing rural call completion problems attributable to practices not consistent with industry "best practices." The Commission could then eliminate the "two-intermediate-provider" Safe Harbor provision. In thus ceasing to rely on this inadequate, inefficient, and inflexible proxy for directly addressing RCC problems, the Commission would act consistently with its general ap-

West described this proposal in detail previously in this proceeding. See, e.g., Comments of HyperCube Telecom, LLC, on Further Notice of Proposed Rulemaking, at 2 - 9 (filed Feb. 24, 2012), https://ecfsapi.fcc.gov/file/7021865912.pdf ("West 2-24-12 FNPRM Comments") at 18 - 19. See also In the Matter of Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing an Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up, Universal Service Reform – Mobility Fund, WC Docket No. 10-90, et al., Reply Comments of HyperCube Telecom, LLC (filed Aug. 19, 2013), https://ecfsapi.fcc.gov/file/7520938706.pdf, at 9 - 10; Reply Comments of HyperCube Telecom LLC at 5 (filed Mar. 30, 2012), https://www.fcc.gov/ecfs/filing/6017027843.

⁵³ Cf. ATIS RCC Handbook, Clause 9, Summary ("It is important to understand that the PSTN is not engineered for 100% call completion at all times and that variations in completion rates will occur subject to variations in offered load on a diurnal and seasonal basis and due to extraordinary circumstances such as disasters and media stimulated calling. Despite the redundancy engineered into many components of the network, there will be occasional failures resulting in outages It is important to distinguish transient variations in call completion rates due to these factors from the persistent difficulties that rural LECs have reported and not treat all instances of call failure as indicative of discrimination.").

proach of focusing on the end-goal – improved RCC performance – while giving providers flexibility in achieving it.⁵⁴ In West's view, retention of the "two-intermediate-provider" Safe Harbor certification requirement would not only be inconsistent with this Commission approach, but also it would not promote achievement of improved RCC performance beyond that to be expected from the rule changes described above and proposed by West.

Should the Commission nonetheless decides to retain the "two-intermediate-provider" limitation for Safe Harbor certification, West strongly recommends that the Commission add two exceptions to the proposed Safe Harbor⁵⁵ requirements. These exceptions properly reflect actual

⁵⁴ See, e.g., Second R&O, Regulatory Flexibility Analysis, at 53, ¶ 5 ("Our balanced approach ensures that covered providers exercise responsibility for rural call completion without imposing an unduly rigid or burdensome mandate. . . .").

⁵⁵ See proposed Section 64.2107 (Safe Harbor from Intermediate Provider Service Quality Standards) (which would exempt from certain obligations a qualifying covered provider if they timely certify they either use no intermediate providers or contractually restrict their intermediate providers "from permitting more than one additional intermediate provider in the call path before the call reaches the terminating provider or terminating tandem.") The Commission has also recognized, however, that there are "good" hops as well as "bad" hops. Thus, the Commission properly expressed its concern "that a specific limit mandate conflates the number of "hops" with good hops; for example, it assumes that a small number of badly performing intermediate providers are better than multiple wellperforming intermediate providers." Second R&O at 11, ¶ 21. West's proposal to eliminate the "twointermediate-provider" requirement avoids this problem, while the Commission's other proposed rules provide a targeted, effective approach aimed at minimizing "bad hops" in call paths, which should lead to improved RCC performance. A "good" hop is one that promotes expeditious and cost-effective call termination, in circumstances which may include network congestion. A "bad" hop is one that uses disfavored and unauthorized practices for call termination, such as unauthorized use of SIM boxes and call termination and re-origination. In West's experience, as both an originating and an intermediate provider, it is not the number of hops that matters, but the kind of hops, and whether they are managed in accordance with industry best practices. Qualification for the Safe Harbor should be based not on the number of hops in the call path but on the way in which they are managed. The Commission's proposed rules, as well as the ATIS RCC Handbook, for example, sug-

network conditions and would not adversely affect, but instead would contribute to, achievement of improved rates of rural call completion.

A. Unavailable Direct Connection "Ignore-the-Hop" Exception

The first situation warranting an explicit exception to the Safe Harbor certification rules occurs when rural telephone companies decline requests by intermediate providers for facilities augmentation despite simultaneous traffic volumes warranting such augmentation. As West has demonstrated, in some cases limitations on available rural telephone company terminating facilities have led to call completion problems.⁵⁶ This proposed "unavailable direct connection" exception promotes resolution of these call completion problems by encouraging rural telephone companies to assume a share of the responsibility for improvement by augmenting their facilities and establishing direct connections with intermediate providers.⁵⁷

gests ways in which providers can manage their downstream providers through contractual obligations. See, e.g., ATIS RCC Handbook, Clause 6.1, Contractual Arrangements.

⁵⁶ See, e.g., Letter from Helen E. Disenhaus, Counsel for HyperCube Telecom, LLC, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Dkt. 13-39 et al. (filed Feb. 14, 2014) (pointing to example of congested tandem facilities serving rural telephone companies); Reply Comments of HyperCube Telecom, LLC, WC Dkt. 13-97 et al. (filed Aug. 19, 2013) at 4-12; Letter from Helen E. Disenhaus, Counsel for HyperCube Telecom, LLC, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Dkt. 13-39, et al. (Jul. 18, 2013).

⁵⁷ Further improvements in RCC performance would, in West's view, occur when this proposal is adopted in conjunction with adoption of West's proposal for a 4 T-1 *prima facie* standard described, *supra* at n. 48, and *infra* at n. 55, for direct connection between requesting providers and RLECs.

Under the proposed amendment, for purposes of qualification for the Safe Harbor and for certifying to an upstream "using" provider the number of "hops" in a call path, certain "hops" would be ignored, and would not be taken into account. The direct connection "ignore-the-hop" exception would apply if an additional hop was inserted in a call path as the result of a certifying provider's handing off a call to another intermediate provider in the following circumstances:

- (a) the certifying provider has a pending or rejected request to the terminating rural telephone company for facilities augmentation, *and*
- (b) the request was based on a demonstrated call volume of traffic to exchange that would require minimum facilities equivalent to four T-1s.⁵⁸

If the rural telephone company does not agree to direct connection with the intermediate provider, and an additional hand-off to another intermediate provider may be necessary for traffic termination, then a provider otherwise meeting Safe Harbor standards would be entitled to certify compliance with the "one additional intermediate provider" standard. The certifying provider could be "used" by upstream providers relying on such certification for purposes of demonstrating their own compliance with Safe Harbor requirements, despite the insertion of an additional "hop" in the

Exchanging this amount of traffic through direct connection is almost always economically efficient for both carriers. *ATIS RCC Handbook* at Clause 5.4, *Network Congestion*. West has previously recommended that the Commission establish a *prima facie* standard for state regulators to apply in Section 251(f) proceedings when an intermediate provider requests direct connection of a small rural local exchange carrier. The proposed standard, also recommended here, was that good faith negotiation of direct connection be required in most situations when the intermediate provider requesting direct connection could show that it had traffic to exchange equivalent to the capacity of four T-1s. *See Comments of HyperCube Telecom, LLC on Further Notice of Proposed Rulemaking*, WC Docket 10-90 *et al.* (filed Feb. 24, 2012) at 6. *See also ATIS RCC Handbook*, Clause 5.4, *Network Congestion* ("Managing to the P.01 Grade of Service may help reduce congestion-related call completion issues.")

call path.⁵⁹ Such an approach would appropriately take into account "good hop" situations in which an additional "hop" may be required for technical reasons beyond the control of the certifying intermediate provider but that can be controlled by the terminating rural telephone company.

It would also incentivize rural telephone companies to implement additional direct connections. All providers in the call path – and not just intermediate providers – have shared responsibility for addressing call completion problems. Adoption of this explicit exception to the "two-intermediate provider hop" standard for Safe Harbor eligibility acknowledges the need for rural telephone company participation in rural call completion improvement, without mandating facilities augmentation in specific circumstances (an approach the Commission previously rejected). The exception balances the needs of both rural telephone companies and intermediate providers, and by avoiding penalizing intermediate providers unfairly, helps ensure that originating providers have a choice of cost-efficient, effective call paths for call termination. The result would be improved rates of RCC in affected rural telephone company territories.

As the Commission has recognized, there is a difference between a "good" hop necessitated for call completion, *See Second R&O* at 11, ¶ 21 (citing *West FNPRM Comments* at 9-16), as when a LEC has refused appropriate facilities augmentation, and a "bad" hop in which there is a hand-off to a "SIP box" or "call looping" occurs and frustrates efforts at effective call completion. *See also ATIS RCC Handbook*, Clause 5.4.3, *Fraud* ("Call completion may also be impacted by fraudulent activity in the network. Individuals or entities may purchase wireless service and use the associated subscriber identity module (SIM) cards together in devices through which they offer to terminate LD traffic by re-originating it as wireless calls."); Clause 6.6, *Do Not Terminate & Re-Originate Calls*. West supports the use of quality standards in proposed Section 64.2117, which including an express obligation to take reasonable steps not to hand off to a provider using loop back, crank back, or termination/re-origination.

⁶⁰ In the *Second R&O*, the Commission declined to adopt a proposal that would have required trunk augmentation when trunks used for RCC paths reached an 80% monthly utilization rate. *Second R&O* at 24, ¶ 48.

B. Anomalous Network Congestion "Ignore-the-Hop" Exception

It would also be appropriate for the Commission to implement an express "ignore-the-hop" approach to reflect anomalous network congestion situations in which national and local emergencies and other special circumstances result in unusual, substantially increased call volumes terminating in a particular rural telephone company territory during a particular period. As the *ATIS RCC Handbook* recognizes,

A common cause of network congestion may be attributed to the mass calling generated by calling situations such as telemarketing, political campaigns, or Emergency Notification System (EMS) messages. Mass calling can initiate a high volume of traffic on a network over a relatively short duration. During this period of time, normal network traffic patterns are disrupted and may result in network con-

⁶¹ The Commission could either establish a threshold of deviation from seasonal normal traffic volumes, such as a traffic volume increase of 35% on a route, or it could leave it to affected providers' reasonable judgment to determine when such anomalous situations exist. Particularly in emergency situations, the focus should be on prompt call completion, even if a hand-off of overflow traffic may be required, and an intermediate provider should not be penalized in terms of its Safe Harbor or upstream provider "hop certifications" by pro-actively addressing a critical and dynamic call environment by opting for adding an additional intermediate provider hand-off in the call path rather than declining to participate in the call path. Call completion, not elimination of "good hops," should be the goal of the Commission's RCC Act implementation rules. In contrast to the proposal of Verizon for an overall 3% de minimis exception to the Safe Harbor standards, Second R&O at 30, ¶ 67, this exception would be applicable only to hand-offs required by specific locality-affecting circumstances. Affording intermediate providers this relief from the stringent Safe Harbor requirements would also provide some of the relief sought by Verizon as an originating provider, and adoption of this exception will also facilitate intermediate providers' satisfaction of their hoplimitation commitments to their upstream providers desirous of Safe Harbor qualification. As noted above, while hop limitation commitments are intended to result in improved RCC, such hop limitations may not in themselves provide significant improvement in RCC beyond those to be expected from implementation of the specific requirements of proposed Section 64.2117(a) (requiring reasonable steps to prevent "bad hop" crank-back, call looping, and call termination/re-origination activities) and (b) (requiring self-monitoring of RCC performance), and in fact these commitments may be counter-productive to achievement of the goal of improved RCC performance.

gestion. These situations may impact calls destined to all customers, including those located in rural areas."62

C. Public Interest Benefits of Adopting the Proposed Exceptions

As West and others have demonstrated in their call waiver petitions, there are certain network situations that may adversely affect strict compliance with Commission rules and warrant relief from them. Including specific exceptions in the Commission's rules in these circumstances not only is not detrimental to achievement of the rules' purposes but also may in fact advance achievement of their goals. Rather than inefficiently requiring affected providers to file, and Commission staff to review, multiple similar waiver requests, the Commission should proactively cover such situations by including exception provisions in the rules themselves.

The specific exceptions requested herein are limited to network congestion situations beyond the control of the affected intermediate provider. When an intermediate provider seeks but does not have direct connection with a rural telephone company despite having traffic warranting direct connection, ignoring an additional intermediate provider hand-off on the route may incentivize the rural telephone company to agree to direct connection, thus augmenting the facilities availa-

ATIS RCC Handbook at § 5.4; see also id. at Clause 5.4.2, Mass Calling; Clause 5.4.4, Force Majeure & Disasters (such events not only may damage networks but also may lead to mass calling). See also ATIS RCC Handbook at Clause 9, Summary ("It is important to understand that the PSTN is not engineered for 100% call completion at all times and that variations in completion rates will occur subject to variations in offered load on a diurnal and seasonal basis and due to extraordinary circumstances such as disasters and media stimulated calling. Despite the redundancy engineered into many components of the network, there will be occasional failures resulting in outages It is important to distinguish transient variations in call completion rates due to these factors from the persistent difficulties that rural LECs have reported and not treat all instances of call failure as indicative of discrimination.").

ble to serve the rural telephone company's customers. When there is unusual network congestion resulting from public safety emergency and other local conditions, an additional hand-off to another intermediate provider may increase the rate and speed of rural call completion. In both situations, an additional hand-off is appropriate to ensure effective and prompt call completion, and circumstances requiring such hand-off are beyond the control of the intermediate provider. In neither situation is the intermediate provider at fault in making the hand-off. In these circumstances, the Commission's Rules should encourage intermediate providers to be proactive to improve call completion, not penalize them for or discourage them from taking appropriate action. Not only should the intermediate provider avoid penalization for such actions, but indeed such actions should be encouraged in these circumstances.

Declining to penalize intermediate providers in such circumstances will also avoid artificially and unnecessarily limiting competition and choice in the marketplace. Intermediate providers will be able to focus on managing their networks efficiently and for effective call completion. Originating providers will have a greater choice of intermediate providers from which to select in managing their own networks for regular and overflow call delivery. Consumers will benefit from improved

⁶³Cf. Second R&O at 11, ¶ 21 (rejecting a cap on the number of intermediate provider hops on the basis that "the record indicates that covered providers would face additional burdens if they lacked flexibility to efficiently route calls during periods of high call volume such as natural disasters and national security related events.").

⁶⁴ Such hand-offs may also avoid, for example, delay caused by retention of a call until the intermediate provider may complete it. *See*, *e.g.*, *ATIS RCC Handbook* at Clause 5.1.3.2, *Call Forwarding/Call Looping Issues* ("Where Intermediate Providers fail to release in a timely manner a call they cannot complete, attempt many routes, or queue calls for completion, long timer values could result in excessive post dial delay for eventually successful calls.").

and more cost-effective service. Including the requested specific "ignore-the-hop" exceptions in the rules is a "win-win" approach that elevates efficient network management by industry experts over artificial paperwork constraints on industry best practices.

The Commission should therefore include in its final Section 64.2107 rules, if, contrary to West's recommendations, the Commission declines to eliminate the "two-intermediate-provider" cap for Safe Harbor certification, the following additional provision at the end of proposed Section 64.2107(a)(1):

EXCEPTION: The following types of hand-offs (or "hops") by one intermediate provider to another intermediate provider may be disregarded and will not be taken into account when determining an upstream provider's eligibility for Safe Harbor certification:

- (a) a hand-off to another intermediate provider when the upstream intermediate provider has requested direct connection with the terminating rural telephone company in the call path, such request is based on the intermediate provider's having demonstrated traffic to exchange that would require minimum facilities equivalent to the capacity of four T-1s, and the request is either pending or has been refused by the rural telephone company
- (b) a hand-off to another intermediate provider when there is seasonally-adjusted unusual network congestion in the territory of the terminating rural telephone company typically resulting from school closing and similar messages, power outages and related notifications national or local public safety and other emergencies, or from local events of limited duration.

An intermediate provider may therefore certify that it is not handing off traffic to another intermediate provider, and its upstream provider may rely on such certification for purposes of its own compliance with Safe Harbor requirements, regardless of whether the certifying intermediate provider does hand off traffic to another intermediate provider in one or both the circumstances identified in (a) and (b) above.

As shown above, inclusion of these exceptions in the Commission's rules would advance achievement of the rules' objective of improved rural call completion and would also be in the public interest by promoting good network management and competition in the industry.

CONCLUSION

For the reasons discussed above, the Commission should adopt the recommendations proposed by West when the Commission adopts regulations implementing the provisions of the Rural Call Completion Act. The Commission should also grant the long-pending waivers of the call signaling rules in this proceeding.

Respectfully submitted,

WEST TELECOM SERVICES, LLC

By: <u>/s/ Helen E. Disenhaus</u>

Helen E. Disenhaus Telecommunications Law Professionals PLLC 1025 Connecticut Ave., N.W. Suite 1011 Washington, DC 20036

Phone: 202-789-3123 Fax: 202-789-3112

HDisenhaus@telecomlawpros.com

Its Counsel

Robert W. McCausland VP, Regulatory and Government Affairs West Telecom Services, LLC 3200 W. Pleasant Run Road Suite 300 Lancaster, TX 75146-1086 RWMcCausland@west.com

Phone: 469-727-1640 Fax: 866-432-3936 Cell/Text: 469-644-4954

Sean M. Ward Associate Counsel West Corporation 1601 Dry Creek Drive Longmont, CO 80503 SWard@west.com Phone: 720-864-5510 Fax: 720-494-6600

June 4, 2018

29 {00124006;v10}